

dugan production corp.

Com #1 J-2-29N-14W
Com #3 J-2-29N-14W
King Com #90 B-11-29N-14W

September 1, 1999

Ms. Lori Wrotenbery, Director
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

Mr. Ray Powell, Commissioner
New Mexico State Land Office
P O Box 1148
Santa Fe, NM 87504-1148

Mr. Lee Otteni, FFO Manager
Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

RECEIVED
SEP - 2 1999
OIL CON. DIV.
DIST. 3

Re: Application for surface commingling of produced gas
Dugan Production's Com No. 1, Com No 3 & King Com No. 90
Plus the off-lease measurement and sale of produced gas from the King Com No. 90
State Leases: LG-3736, NM B-11242-43, NM E-6714-4; Federal Lease: SF 078110;
Multiple Fee leases
Basin Fruitland Coal & Harper Hill Fruitland Sand PC Pools
San Juan County, New Mexico

Dear Ms. Wrotenbery, Mr. Otteni and Mr. Powell,

We are writing to request your approvals for the proposed surface commingling of produced natural gas from the three captioned wells, all three of which are operated by Dugan Production Corp. In addition, we are also requesting your approvals for the off-lease measurement and sale of natural gas from the King Com No. 90. The proposed CDP meter is currently the gas sales meter for the Com No. 1 and is located at the Com No. 1 well.

Dugan Production holds 99.9% to 100% of the working interest and Attachments 1 and 2 present the spacing unit, lease and interest ownership details for all three wells. The proposed surface commingling includes production from two Basin Fruitland Coal wells (the Com No. 1 and King Com No. 90), plus one Harper Hill Fruitland Sand-PC well (the Com No. 3). To date, there has been no liquid hydrocarbon production from any of the three completions to be commingled and none is anticipated. The ownership interest in all three wells is not common, and all interest owners (working, royalty and overriding royalty) will receive a copy of this application by certified mail. Attachments 7, 8 & 9 are copies of letters to the various interest owners.

The Com No. 1 (API #30 045 08722) was initially completed in the Basin Dakota pool on 4-9-61 and after producing 133.9 MMCF of gas, the Dakota completion was abandoned and the well recompleted in the Basin Fruitland Coal on 12-1-90. The spacing unit for the Com No. 1 is the E/2 (316.65A) of Section 2, T-29N, R-14W and Administrative Order NSL-3826 authorizes the non-standard Basin Fruitland Coal well location. The Com No. 1 Fruitland Coal completion was placed on production during 5/98, and upon installing rod pumping equipment and well head compression, the Fruitland Coal averaged 255 MCFD + 90 BWPD during 7/99. Attachment No. 4 includes the production history for the Com No. 1 Fruitland Coal completion which has

produced a total of 68,529 MCF + 32,186 bbl water as of 8-1-99. The gas is delivered into El Paso Field Service's Blanco Plant system which averages 250 to 300 psig and has necessitated the installation of wellhead compression. We currently operate two compressors, a screw compressor which feeds a single stage conventional compressor and provides a wellhead operating pressure of ± 12 psig. The water production is disposed of in Dugan's Stella Needs a Com No. 1E water disposal well.

The Com No. 3 well (API No. 30-045-23267) was completed in the Harper Hill-Fruitland PC pool 3-14-79 (renamed Harper Hill Fruitland Sand PC Pool 11-1-88) and has produced a total of 77,943 MCF of gas as of 8-1-99. The spacing unit comprises the SE/4 (160A) of Section 2, T-29N, R14W. This well has been shut in since 5/91, being uneconomical to continue to operate the wellhead compressor that was necessary to deliver gas into the pipeline which was averaging 250-425 psi at the time of shut in. As a result of low pipeline deliveries, El Paso removed the metering equipment in 1994. The Com No. 3 currently has a shut in wellhead pressure of ± 250 psi and is $\pm 383'$ from the Com No. 1. It is proposed to use the production equipment and compressors currently installed at the Com No. 1 to return the Com No. 3 to production which will require the surface commingling of production and will entail re-routing the Com No. 3 gas sales line to connect to the separator for the Com No. 1 as shown on the proposed facility diagram (Attachment No. 3). Use of the existing Com No. 3 sales line will be discontinued and as previously discussed, El Paso has removed the metering equipment. We are hopeful that at the lower operating pressures made available with the compressors on the Com No. 1, production from the Com No. 3 can be restored. The production history for the Com No. 3 is presented on Attachment No. 4, which shows that the well has never produced very well, averaging 10-15 MCFD at the time it was shut in.

The King Com No. 90 (API No. 30-045-29883) was completed 6-15-99 in the Basin Fruitland Coal pool, with an initial potential of 20 MCFD + 31 BWPD from perforations 958'-1084'. The spacing unit comprises the E/2 (320.13A) of Section 11, T-29N, R-14W. Testing to date is encouraging and is summarized on Attachment No. 4. This is an area that the Fruitland Coal pool is fairly shallow ($\pm 1000'$) and the reservoir pressure fairly low (± 350 psi). The coal outcrops and is being strip mined approximately 7-8 miles to the west. To date very little gas has been produced from the Fruitland Coal in this area. Based upon the initial testing, we do anticipate obtaining commercial gas volumes from the King Com No. 90, however to deliver gas into El Paso's system, which currently averages 250-300 psi, wellhead compression and production equipment to separate gas and water will be necessary. We propose to utilize the production equipment and compressors at the Com No. 1 which will require surface commingling and off-lease measurement for the King Com No. 90. This will minimize our expenditures to place this well on production, will allow the existing surplus compressor capacity at the Com No. 1 to be utilized and will eliminate the need to install a compressor at a location that is $\pm 1/3$ mile from the Mesa Residential Community mobile home park in the northwest part of the city of Farmington.

This proposed conversion of the Com No. 1 gas sales meter to a central delivery gas sales meter for the Com No. 1, Com No. 3 and King Com No. 90 plus the proposed use of the separator and gas compressor currently on the Com No. 1 for all three wells will allow Dugan Production to use existing equipment to return a currently idle and marginally productive well (the Com No. 3) to production and place on production a recently completed well which tested an initial potential of 20 MCFD + 31 BWPD. All production (gas and water) from each well will be surface commingled and separated at the separator located on the Com No. 1. The commingled gas stream will be compressed and delivered into El Paso Field Service's (EPFS) pipeline from the CDP sales meter operated and maintained by EPFS. The water will be stored in a tank on the Com No. 1 location and trucked to Dugan's Stella Needs a Com No. 1 water disposal system (or possibly a commercial facility if needed). Each well will be tested at regular intervals using a portable three phase test unit owned by DPC and the tests used to establish factors for allocating the CDP gas sales and water production. For the first year of operation, we propose testing each well every three months and then at a frequency to be established by production performance. Any

unexplained change in either total gas or water would initiate a re-test of all wells and new allocation factors. After the first 12 months, we plan to test each well annually unless a shorter frequency is indicated by production. Our proposed allocation procedures are presented on Attachment No. 5. Dugan's portable test unit is a trailer mounted three-phase separator capable of measuring oil, water and gas. Gas production is recorded on a conventional flow chart using a Barton Dry Flow Orifice Meter which is calibrated and maintained by DPC. The test unit will be connected to the flow line at each well site, the total production stream separated and individual streams measured, and then all fluids returned to the flowline and transferred to the central battery. We have been using this unit for approximately four years and have found it to produce accurate measurements especially in the lower volume wells such as two of those on our proposed system.

The integrity of our system will be periodically monitored using DPC's gas detector and the entire system will be pressure tested prior to being placed into service.

The gas from each completion is compatible and very similarly in composition. Copies of the current gas analyses for the Com No. 1 (Basin Fruitland Coal) and Com No. 3 (Harper Hill Fruitland Sand-PC) are presented on Attachment No. 6. We do not have an analysis from the King Com No. 90 Basin Fruitland Coal completion, but believe it will be very similar to the Fruitland Coal gas in the Com No. 1. Upon placing this system in operation, we plan to take individual well gas analyses in accordance with the BLM's Onshore Order No. 5 to ensure the accurate allocation of BTU's and revenues from the CDP sales meter.

The installation of this three well gathering system will provide an economic benefit for each of the three wells and their various interest owners. The Com No. 1 interest owners will benefit from increased gas sales since the ± 41 MCFD currently being used for compressor fuel, and supplied 100% from the production of the Com No. 1, will be allocated between the three wells. If the Com No. 3 and King Com No. 90 produce a combined rate of ± 50 MCFD, approximately 16% of the lease fuel will be allocated away from the Com No. 1 which will result in increased gas sales of ± 7 MCFD or ± 200 MCF/month. At the current gas price of $\pm \$1.83$ /MMBTU, this will produce an increased revenue of $\pm \$385$ /month or $\$4,600$ /year for the interest owners presented on page no. 1 of Attachment No. 2.

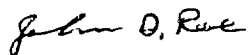
The Com No. 3 interest owners will benefit from a well being idle for the past ± 8 years being returned to production with very minimal expenditures for equipment. The Com No. 3 currently has no metering equipment and based upon production prior to shutting in, this well did not produce sufficient gas volumes to justify the necessary individual wellhead compressor, however we are hopeful that production from the Com No. 3 will justify the sharing of production and compression equipment. In addition, an idle well will be returned to production and expenditures to formally temporarily abandon and/or plug and abandon this well will not be necessary. If a production rate of 10-15 MCFD is restored, the interest owners of the Com No. 3 (presented on page no. 2 of Attachment No. 2) will realize a revenue of $\pm \$600$ - $\$900$ /month which will net $\pm \$100$ - $\$400$ /month after operating expenses.

The King Com No. 90, being newly completed has no production equipment for separating gas and water and will need wellhead compression to deliver gas to EPFS. An initial production rate of ± 25 - 35 MCFD is anticipated which will produce a revenue of $\pm \$1,400$ - $\$2,000$ /month and the anticipated expenditures of $\pm \$25,000$ for metering and production equipment will not be necessary which will benefit the King Com No. 90 interest owners listed on page no. 3 of Attachment No. 2. In addition, since the King Com No. 90 is located only $\pm 1/3$ of a mile west of a mobile home park, and considering all of the attention compressor noise is currently receiving, there is an additional benefit of not installing a compressor at the King Com No. 90 well site, but using an existing compressor located $\pm 1/2$ mile away.

In summary, Dugan Production proposes to install a three well gathering system that will allow a low volume idle well to be returned to production, a low volume recently completed well to be placed on production and will extend the economic life of an existing well. The natural gas will be delivered to El Paso Field Services at their CDP sales meter and will be allocated to each well using allocation factors, determined from periodic individual well tests. We do not anticipate any liquid hydrocarbon production and believe that the operation of this system will provide an economic benefit to all interest owners.

Should you have questions or need additional information, please let me know.

Sincerely,



John D. Roe
Engineering Manager

JDR/tmf

xc: NMOCD - Aztec
All interest owners - WI, RI, ORRI

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator DUGAN PRODUCTION CORP.			Lease Com		Well No. 1
Unit Letter J	Section 2	Township 29 North	Range 14 West	County San Juan	
Actual Footage Location of Well: 1750 feet from the South line and 1820 feet from the East line					
Ground level Elev. 5516'	Producing Formation Fruitland Coal	Pool Basin Fruitland Coal			Dedicated Acreage: 316.65 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation

NSL-3226

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) C.A. Agrmt #NMNM 91272, approved 1/18/94, effective 12/1/90

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

RECEIVED SEP - 4 1999 OIL CON. DIV. DIST. 3	Lot 2 Dugan Prod. 38.49 A NM B-11242-43	Lot 1 Dugan Prod. 38.16 A LG-3736
	Dugan Prod. 80 A NM E-6714-4	
	Dugan Prod. 40 A LG-3736	Dugan Prod. 80 A 1820'
	Dugan Prod. 40 A Fee Lse. (King)	SF-078110

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name

Position

Vice President

Company

Dugan Production Corp.

Date

3/7/94

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

3-21-61

Signature & Seal of
Professional Surveyor

Original signed survey
plat by James P. Leese
is on file.

Certificate No.

1463

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Attachment
No. 1
pg 2 of 3

Operator Dugan Production Corp.		Lease Com		Well No. 3	
Unit Letter J	Section 2	Township 29N	Range 14W	County San Juan	
Actual Footage Location of Well: 1850 feet from the South line and 1450 feet from the East line					
Ground Level Elev. 5515	Producing Formation Fruitland - PC	Pool Harper Hill FR Sand PC		Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

RECEIVED
SEP - 2 1999
OIL CON. DIV.
DIST. 3

LG 3736

1450

1850

USG

Fee

SF 078110

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Thomas A. Dugan

Name

Thomas A. Dugan

Position

Petroleum Engineer

Company

Dugan Production Corp.

Date

September 21, 1990

REGISTERED LAND SURVEYOR
I hereby certify that the location of this plat was plotted in the field for acreage made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.
E. V. ECHOHAWK
MEXICO

Date Surveyed

Nov. 2, 1978

Registered Professional Engineer and/or Land Surveyor

E. V. Echohawk

Certificate No. 3602

E. V. Echohawk L.S.

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Attachment
No. 1
pg 3 of 3

Form C-102
Revised February 21, 1994
Instructions on back
Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30 045		2 Pool Code 71629		3 Pool Name Basin Fruitland Coal	
4 Property Code		5 Property Name King Com			6 Well Number 90
7 OGRID No. 006515		8 Operator Name Dugan Production Corporation			9 Elevation 5478'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	11	29N	14W	B	1128	North	1511	East	San Juan

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres
320.13

13 Joint or Infill

14 Consolidation Code

15 Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 <p>RECEIVED SEP 2 1999 OIL CON. DIV. DIST. 3</p>	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
	Signature Sherman E. Dugan Printed Name Vice-President Title 3/19/99 Date	
	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. March 18, 1999 Date of Survey Signature and Seal Certificate Number 5979	

ATTACHMENT 2-PAGE 1 OF 3

Dugan Production Corp.
Com Well No. 1
Basin Fruitland Coal
Well Location: NWSE 2, T-29N, R-14W
Spacing Unit: E/2 Sec.2, T-29N, R-14W
(316.65A)
San Juan County, New Mexico

<u>INTEREST OWNER</u>	<u>INTEREST%</u>	
	<u>Net</u>	<u>Gross</u>
<u>Royalty</u> State of New Mexico State Land Office Attn: Pete Martinez P. O. Box 1148 Santa Fe, NM 87504-1148	7.762910	-0-
USA - Bureau of Land Management 1235 La Plata Hwy. Farmington, NM 87401	3.158070	-0-
Rilla E. King P. O. Box 186 Dolores, CO 81325	1.579030	-0-
<u>Overriding Royalty Interest</u> Marcia M. Daniels c/o Clotilda M. Pope 5480 Wisconsin Ave., Suite 814 Chevy Chase, MD 20015	0.030390	-0-
Louise Adair McDougal Hadley 2 Bluff Road Swansboro, NC 28584	0.121550	-0-
Charles Alan McDougal 7928 Rooksley Ct Raleigh, NC 27615	0.121550	-0-
Robert Bruce McDougal 6608 Penny Lane Bartlesville, OK 74006	0.121550	-0-
Anne S. Henderson 2969 Upton St. NW, Apt. 3 Washington, DC 20008	0.121550	-0-
Robin Thomas Henderson 5028 River Road Bethesda, MD 20016	0.030390	-0-
Russell Stewart Henderson, Jr. 5028 River Road Bethesda, MD 20016	0.030390	-0-
Clotilda M. Pope 5480 Wisconsin Ave., Suite 814 Chevy Chase, MD 20015	0.030390	-0-
Conoco, Inc. 10 Conoco Plaza, 10 Desta Drive Midland, TX 79705	2.368550	-0-
<u>Working Interest</u> Dugan Production Corp.	<u>84.523680</u>	<u>100.000000</u>
TOTAL WELL	100.000000	100.000000

ATTACHMENT 2--PAGE 2 OF 3

Dugan Production Corp.

Com Well No. 3

Harper Hill Fruitland Sand Pictured Cliffs

Well Location: NWSE 2, T-29N, R-14W

Spacing Unit: SE/4 Sec.2, T-29N, R-14W
(160.00A)

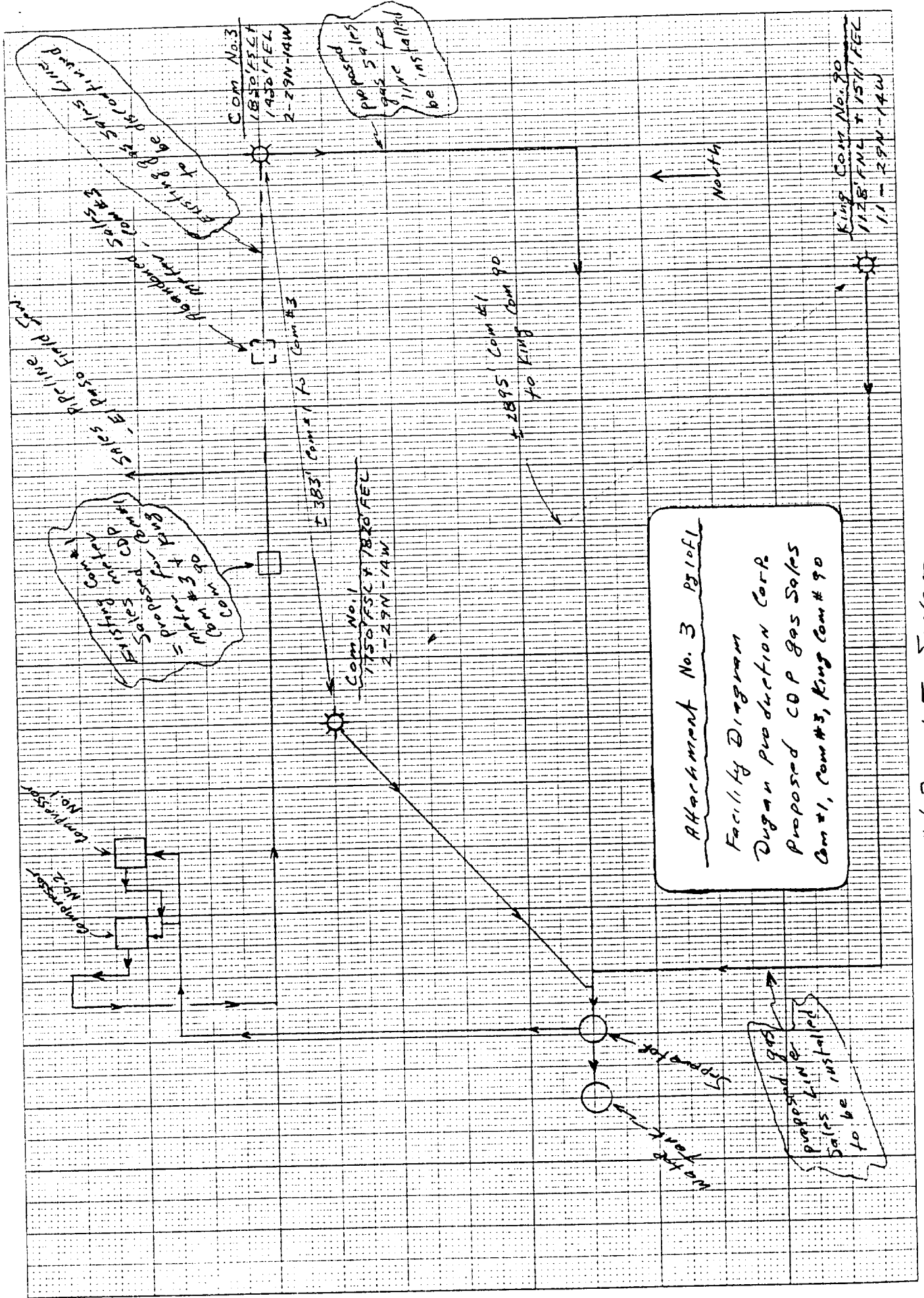
San Juan County, New Mexico

<u>INTEREST OWNER</u>	<u>INTEREST%</u>	
	<u>Net</u>	<u>Gross</u>
<u>Royalty</u>	3.125000	-0-
State of New Mexico State Land Office Attn: Pete Martinez P. O. Box 1148 Santa Fe, NM 87504-1148		
USA - Bureau of Land Management 1235 La Plata Hwy. Farmington, NM 87401	6.25000	-0-
Rilla E. King P. O. Box 186 Dolores, CO 81325	3.125000	-0-
<u>Working Interest</u>	87.500000	100.000000
Dugan Production Corp.		
TOTAL WELL	100.000000	100.000000

ATTACHMENT 2-PAGE 3 OF 3

Dugan Production Corp.
King Com Well No. 90
Basin Fruitland Coal
Well Location: NWNE 11, T-29N, R-14W
Spacing Unit: E/2 Sec. 11, T-29N, R-14W
(320.13A)
San Juan County, New Mexico

<u>INTEREST OWNER</u>	<u>INTEREST %</u>	
<u>Royalty</u>	<u>Net</u>	<u>Gross</u>
USA - Bureau of Land Management 1235 La Plata Hwy. Farmington, NM 87401	7.814403	-0-
Rilla E. King P. O. Box 186 Dolores, CO 81325	2.342798	-0-
Joseph E. & Twila M. Goodding Living Trust c/o Twila M. Goodding, Trustee 1009 Crestview Circle Farmington, NM 87401	0.780933	-0-
Betty Jane Akins 1309 Dewey Lane Alamogordo, NM 88310	0.292850	-0-
Colleen McSparron 810 Stratford Pismo Beach, CA 93449	0.292850	-0-
LaRue Schenck 3016 Crestridge Farmington, NM 87401	0.292850	-0-
Geraldine Sterling Box 74 Farmington, NM 87499	0.292850	-0-
Robert F. Johnston and Janice A. Johnston 605 Parkland Drive Aztec, NM 87410	0.014642	-0-
Larry Dimmick 650 W. Main, Ste. C Farmington, NM 87401	0.029285	-0-
Bill Jensen 613 Merino Kraal Farmington, NM 87401	0.029285	-0-
Randall E. Presley P. O. Box 2200 Bakersfield, CA 92663	0.187424	-0-
Motor Property Partners 6515 Tevis Drive Bakersfield, CA 93309	0.187424	-0-
State Highway Department of New Mexico P. O. Box 1149 Santa Fe, NM 87504-1149	0.052713	-0-
<u>Working Interest</u>		
Lee Atchison P. O. Box 15069 Farmington, NM 87499-5069	0.117140	0.117140
Dugan Production Corp.	<u>87.272553</u>	<u>99.882860</u>
TOTAL WELL	100.000000	100.000000

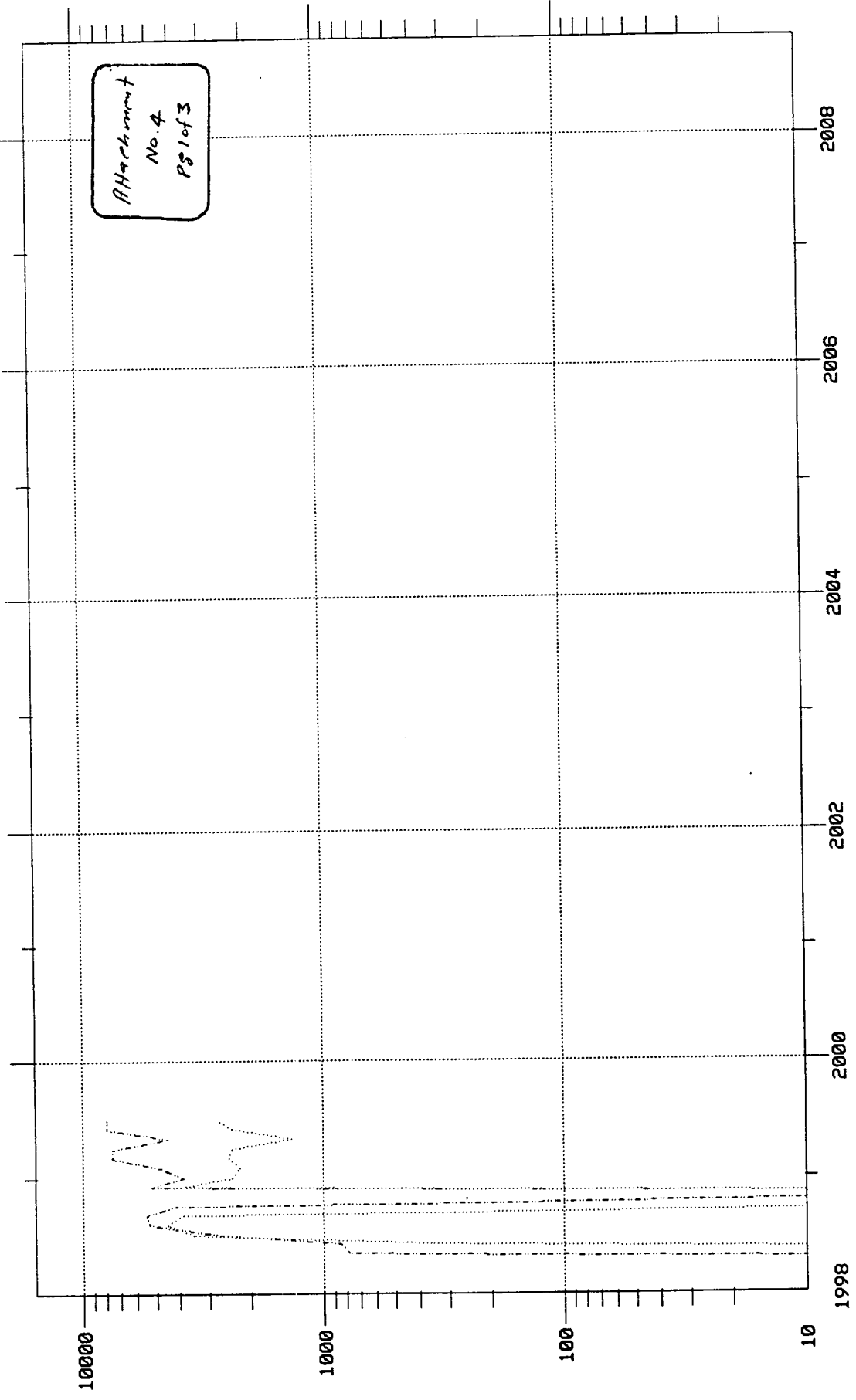


- Not Drawn To Scale -

Calculated
Oil
Gas
Water

DUGAN PRODUCTION CORP
Production Rate vs Time
Bbl/Mo or Mcf/Mo vs Months
COM No. 1
BASIN FRUITLAND COAL

Production
Oil
Gas
Water

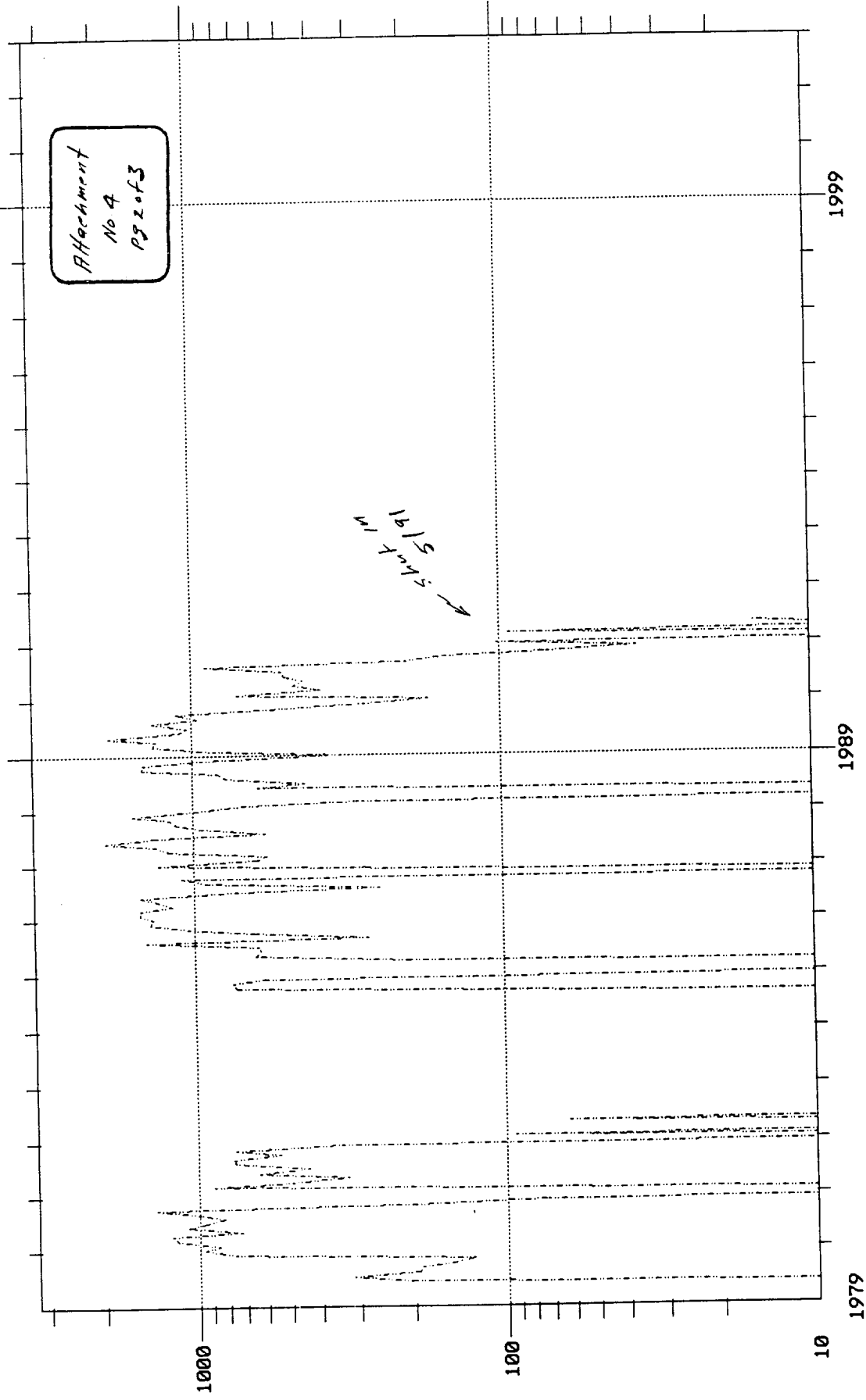


Reported Oil Production = 0 Bbl's
Reported Gas Production = 68529 Mcf
Reported Water Production = 32186 Bbl's

Calculated
Oil
Gas
Water

DUGAN PRODUCTION CORP
Production Rate vs Time
Bbl/Mo or Mcf/Mo vs Months
COM No. 3
HARPER HILL FRUITLAND SAND-PICTURED CLIFFS

Production
Oil
Gas
Water



Reported Oil Production = 0 Bbls
Reported Gas Production = 77943 Mcf
Reported Water Production = 0 Bbls

Attachment No. 4 - Page 3 of 3
King Com No. 90

Completion & Test History

5/24/99	Perforate Fruitland Coal 958'-964', 997'-1001', 1077'-1084'
6/14/99	Pump into Fruitland Coal perfs 958'-1084' w/500 gal. 15% HCL & 900 bbl water.
6/15/99	Installed 1-1/2" rod pump and commenced testing.
7/22/99	Pump tested 20 MCFD + 31 BWPD. Reported initial potential.
7/24-25/99	Pump tested 15.1 MCFD + 25.9 BWPD.
7/26-27/99	Pump tested 15.5 MCFD + 12.7 BWPD.
8/4-9/99	Pump tested 16.7 MCFD + 11.9 BWPD.
8/9/99	16.9 MCFD.
8/10/99	23.9 MCFD + 19 BWPD.
8/11/99	Shut in. Waiting on pipeline connection.

Attachment No. 5
Allocation Procedures
Dugan Production Corp.'s
Proposed Surface Commingling & Off-Lease Measurement
Com No. 1 CDP: J-2-29N-14W
San Juan County, New Mexico

Base Data:

U=Water volume (BWPD) from Periodic Well Test x days operated during allocation period
V=Water volume (bbl) at Central Battery during allocation period
W=Gas volume (MCFD) from Periodic Well Test x days operated during allocation period
X=Gas volume (MCF) from CDP Sales Meter during allocation period
Y=BTU's from CDP Sales Meter during allocation period
Z=Gas Revenue (\$) from CDP Sales Meter during allocation period

Allocation Period is typically a calendar month and will be the same for all wells.

1. Individual Well Gas Production = A+B+C+D+E

A = Allocated Sales Volume, MCF.
= (W/SUM W) x X

B = On lease fuel usage, MCF. Determined from equipment specifications and operating conditions.

C = Purged and/or vented gas from well and/or lease equipment, MCF. Calculated using equipment specifications and pressures.

D = Allocated fuel from gathering system equipment, MCF. The total fuel required to operate gathering system equipment will be allocated to the individual wells benefiting from the equipment using allocation factors determined by W / Sum W for the wells involved.

E = Allocated volume of gas lost and/or vented from the gathering system and/or gathering system equipment, MCF. The total volume will be determined using industry accepted procedures for the conditions existing at the time of the loss. All volumes corresponding to liquid condensation within the gathering system will also be determined. The total volume lost and/or vented will be allocated to the individual wells affected using factors determined by W / Sum W.

2. Allocated Individual Well BTU's = ((W x Individual well BTU) / Sum (W x individual well BTU)) x Y.

Individual well gas heating values to be determined in accordance with BLM's Onshore Order No. 5.

3. Allocated Individual Gas Revenues = (Allocated Individual well BTU's / Sum Allocated individual well BTU's) x Z

4. Individual Well Water Production = Allocated production volume, bbl=(U / Sum U) x V

CO.CD 23 EL PASO NATURAL GAS
CUSTOMER ACCOUNTING SERVICES DEPARTMENT
VOLUME CALCULATION DIVISION
POST OFFICE BOX 1492
EL PASO, TEXAS 79978

CONTACTS:
EL PASO FIELD SERVICES
(713) 757-5953
EL PASO MAINLINE
(915) 496-2595

CHROMATOGRAPHIC GAS ANALYSIS REPORT

DATE 7/07/99

Attachment
No. 6
Pg 1 of 2

MAILEE
26730

DUGAN PRODUCTION CORPORATION
P O BOX 420
FARMINGTON, NM 87499-0420

METER NUMBER 73044 - COM #1 - Basin Fruitland Cool (J-2-29N-14W)
OPERATOR 1862 - DUGAN PRODUCTION CORP

ANALYSIS DATE 5/17/99
SAMPLE DATE 5/14/99
EFFECTIVE DATE 6/01/99
EFFECTIVE FOR 6 MONTHS

TYPE CODE 2 - ACTUAL
H2S GRAINS 0
LOCATION F - FARM BECK

COMPONENTS	NORMALIZED MOL %	GPM
CO2	.69	.000
H2S	.00	.000
N2	.19	.000
METHANE	97.32	.000
ETHANE	1.10	.294
PROPANE	.37	.102
ISO-BUTANE	.07	.023
NORM-BUTANE	.10	.032
ISO-PENTANE	.04	.015
NORM-PENTANE	.03	.011
HEXANE PLUS	.09	.039
	100.00	0.516

SPECIFIC GRAVITY .578
MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1029
RATIO OF SPECIFIC HEATS .000
NO TEST SECURED FOR H2S CONTENT

EL PASO NATURAL GAS COMPANY
VOLUME ACCOUNTING DEPARTMENT
MEASUREMENT DIVISION
POST OFFICE BOX 1492
EL PASO, TEXAS 79978
PHONE: (915) 541-5267
CHROMATOGRAPHIC GAS ANALYSIS REPORT

DATE 11/13/89

MAILEE
26730

DUGAN PRODUCTION CORPORATION
P. O. BOX 208
FARMINGTON, NEW MEXICO 87401

Attachment
No. 6
pg 2 of 2

METER NUMBER 90541 - COM 3 - Harper Hill Fruitland Sand - PC (J-2-29N-14W)
OPERATOR 1862 - DUGAN PRODUCTION CORP

ANALYSIS DATE 0/00/00
SAMPLE DATE 10/20/89
EFFECTIVE DATE 11/01/89
EFFECTIVE FOR 6 MONTHS

TYPE CODE 2 - ACTUAL
H2S GRAINS 0
LOCATION F - FARMINGTON

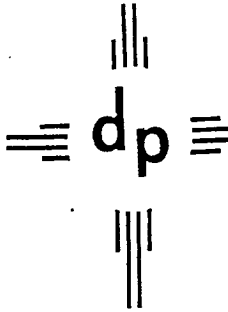
COMPONENTS	NORMALIZED MOL %	GPM
CO2	.56	.000
H2S	.00	.000
N2	.37	.000
METHANE	95.82	.000
ETHANE	1.71	.457
PROPANE	.78	.215
ISO-BUTANE	.06	.020
NORM-BUTANE	.30	.095
ISO-PENTANE	.08	.029
NORM-PENTANE	.06	.022
HEXANE PLUS	<u>.26</u>	<u>.113</u>
	100.00	0.951

SPECIFIC GRAVITY .593

MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1053

RATIO OF SPECIFIC HEATS 1.302

NO TEST SECURED FOR H2S CONTENT



dugan production corp.

Attachment
No. 7
Pg 1 of 1

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 1, 1999

Mr. Lee Atchison
P. O. Box 15069
Farmington, NM 87499-5069

Re: Application for surface commingling & off-lease measurement of produced gas
Dugan Production's King Com No. 90
Basin Fruitland Coal Pool
Unit B, Section 11, T-29N, R-14W
San Juan County, New Mexico

Dear Mr. Atchison,

Attached for your review, information and file is a complete copy of the captioned application to surface commingle production from our jointly owned King Com No. 90 with production from the Com No. 1 and Com No. 3 wells also operated by Dugan Production Corp. Our records indicate that you have a 0.11714% working interest in the King Com No. 90.

The proposal will allow Dugan Production to utilize existing production and compression equipment to place the King Com No. 90 into production and will eliminate the expenditures necessary to install individual separation, metering and compression equipment on the King Com No. 90. As a result the completion costs will be reduced and hopefully gas revenues using shared facilities will be increased.

Should you have questions regarding this proposal, please feel free to contact me at the letterhead address or phone. Should you have concerns or objections to our application, you should direct them to the NMOCD Director, Ms. Lori Wrotenbery at 2040 South Pacheco Street, Santa Fe, NM 87505, or call her at (505)827-7132 within 20 days of this letter date. Should you do so, we would appreciate you also letting us know of your concerns or objections.

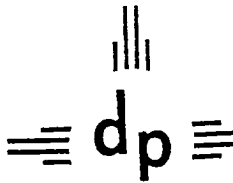
Sincerely,

John D. Roe

John D. Roe
Engineering Manager

JDR/tmf

attachment



dugan production corp.

Attachment
No. 8
Pg 1 of 2

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 1, 1999

To: Royalty Interest Owners (address list attached)
Dugan Production Corp.'s
Com No. 1 (J-2-29N-14W)
Com No. 3 (J-2-29N-14W)
King Com No. 90 (B-11-29N-14W)
San Juan County, New Mexico

Gentlemen:

Dugan Production Corp. has filed an application with the New Mexico Oil Conservation Division (NMOCD), the New Mexico State Land Office and the Bureau of Land Management requesting their approvals to surface commingle natural gas produced from the captioned three wells. This will allow us to more efficiently produce all three wells and should increase your royalty revenues.

A complete copy of our application is attached for your information and review. Should you have any questions regarding this proposal please feel free to contact me at the letterhead address or phone. Should you have concerns or objections to our application, you should direct them to the NMOCD Director, Ms. Lori Wrotenbery, at 2040 South Pacheco Street, Santa Fe, NM 87505, or call her at (505) 827-7132, within 20 days of this letter date. Should you do so, we would appreciate you also letting us know of your concerns or objections.

Sincerely,

John D. Roe
Engineering Manager

JDR/tmf

attachment

Interest Owner Address List
(a = Com No. 1, b = Com No. 3, c = King Com No. 90)

Attachment
No. B
Pg 2 of 2

Royalty Interest Owners

Betty Jane Akins (c)
6515 Tevis Drive
Alamogordo, NM 88310

Larry Dimmick (c)
650 W. Main, Suite C
Farmington, NM 87401

Joseph E. & Twila M. Goodding Living Trust (c)
c/o Twila M. Goodding, Trustee
1009 Crestview Circle
Farmington, NM 87401

Bill Jensen (c)
613 Merino Kraal
Farmington, NM 87401

Robert F. Johnson & Janice A. Johnston (c)
605 Parkland Drive
Aztec, NM 87410

Rilla E. King (a, b, c)
P. O. Box 186
Dolores, CO 81325

Colleen McSparron (c)
810 Stratford
Pismo Beach, CA 93449

Motor Property Partners (c)
1309 Dewey Lane
Bakersfield, CA 93309

Randall E. Presley (c)
P. O. Box 2200
Bakersfield, CA 92663

LaRue Schenck (c)
3016 Crestridge
Farmington, NM 87401

State Highway Department (c)
P. O. Box 1149
Santa Fe, NM 87504-1149

State of New Mexico (a & b)
State Land Office
Attn: Pete Martinez
P. O. Box 1148
Santa Fe, NM 87504-1148

Geraldine Sterling (c)
Box 74
Farmington, NM 87499-0074

USA-Bureau of Land Management (a,b,c)
1235 La Plata Highway
Farmington, NM 87401

Overriding Royalty Interest Owners

Conoco, Inc. (a)
10 Conoco Plaza, 10 Desta Drive
Midland, TX 79705

Marcia M. Daniels (a)
c/o Clotilda M. Pope
5480 Wisconsin Ave., Suite 814
Chevy Chase, MD 20015

Louise Adair McDougal Hadley (a)
2 Bluff Road
Swansboro, NC 28584

Anne S. Henderson (a)
2969 Upton St., NW, Apt. 3
Washington, DC 20008

Robin Thomas Henderson (a)
5028 River Road
Bethesda, MD 20016

Russell Stewart Henderson, Jr. (a)
5028 River Road
Bethesda, MD 20016

Charles Alan McDougal (a)
7928 Rooksley Ct.
Raleigh, NC 27615

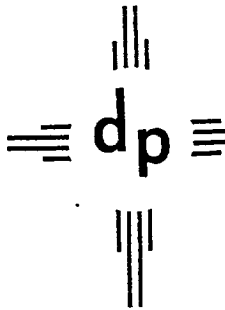
Robert Bruce McDougal (a)
6608 Penny Lane
Bartlesville, OK 74006

Clotilda M. Pope (a)
5480 Wisconsin Ave., Suite 814
Chevy Chase, MD 20015

Working Interest Owners

Lee Atchison (c)
P. O. Box 15069
Farmington, NM 87499-5069

Dugan Production Corp. (a,b,c)
P. O. Box 420
Farmington, NM 87499-0420



dugan production corp.

Attachment
No. 9
PS 1 of 2

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 1, 1999

To: Overriding Royalty Interest Owners (address list attached)
Dugan Production Corp.'s
Com No. 1 (J-2-29N-14W)
San Juan County, New Mexico

Gentlemen:

Dugan Production Corp. has filed an application with the New Mexico Oil Conservation Division (NMOCD), the New Mexico State Land Office and the Bureau of Land Management requesting their approvals to surface commingle natural gas produced from the captioned well with the gas from two other wells also operated by Dugan Production. This will allow us to more efficiently produce all three wells and should increase your gas revenues from the Com No. 1.

A complete copy of our application is attached for your information and review. Should you have any questions regarding this proposal please feel free to contact me at the letterhead address or phone. Should you have concerns or objections to our application, you should direct them to the NMOCD Director, Ms. Lori Wrotenbery, at 2040 South Pacheco Street, Santa Fe, NM 87505, or call her at (505) 827-7132, within 20 days of this letter date. Should you do so, we would appreciate you also letting us know of your concerns or objections.

Sincerely,

John D. Roe

John D. Roe
Engineering Manager

JDR/tmf

attachment

Interest Owner Address List
(a = Com No. 1, b = Com No. 3, c = King Com No. 90)

*Attachment
No. 9
Pg 2 of 2*

Royalty Interest Owners

Betty Jane Akins (c)
6515 Tevis Drive
Alamogordo, NM 88310

Larry Dimmick (c)
650 W. Main, Suite C
Farmington, NM 87401

Joseph E. & Twila M. Goodding Living Trust (c)
c/o Twila M. Goodding, Trustee
1009 Crestview Circle
Farmington, NM 87401

Bill Jensen (c)
613 Merino Kraal
Farmington, NM 87401

Robert F. Johnson & Janice A. Johnston (c)
605 Parkland Drive
Aztec, NM 87410

Rilla E. King (a, b, c)
P. O. Box 186
Dolores, CO 81325

Colleen McSparron (c)
810 Stratford
Pismo Beach, CA 93449

Motor Property Partners (c)
1309 Dewey Lane
Bakersfield, CA 93309

Randall E. Presley (c)
P. O. Box 2200
Bakersfield, CA 92663

LaRue Schenck (c)
3016 Crestridge
Farmington, NM 87401

State Highway Department (c)
P. O. Box 1149
Santa Fe, NM 87504-1149

State of New Mexico (a & b)
State Land Office
Attn: Pete Martinez
P. O. Box 1148
Santa Fe, NM 87504-1148

Geraldine Sterling (c)
Box 74
Farmington, NM 87499-0074

USA-Bureau of Land Management (a,b,c)
1235 La Plata Highway
Farmington, NM 87401

Overriding Royalty Interest Owners

Conoco, Inc. (a)
10 Conoco Plaza, 10 Desta Drive
Midland, TX 79705

Marcia M. Daniels (a)
c/o Clotilda M. Pope
5480 Wisconsin Ave., Suite 814
Chevy Chase, MD 20015

Louise Adair McDougal Hadley (a)
2 Bluff Road
Swansboro, NC 28584

Anne S. Henderson (a)
2969 Upton St., NW, Apt. 3
Washington, DC 20008

Robin Thomas Henderson (a)
5028 River Road
Bethesda, MD 20016

Russell Stewart Henderson, Jr. (a)
5028 River Road
Bethesda, MD 20016

Charles Alan McDougal (a)
7928 Rooksley Ct.
Raleigh, NC 27615

Robert Bruce McDougal (a)
6608 Penny Lane
Bartlesville, OK 74006

Clotilda M. Pope (a)
5480 Wisconsin Ave., Suite 814
Chevy Chase, MD 20015

Working Interest Owners

Lee Atchison (c)
P. O. Box 15069
Farmington, NM 87499-5069

Dugan Production Corp. (a,b,c)
P. O. Box 420
Farmington, NM 87499-0420